The only notable obstacle I faced was making the program more readable, as my first iteration of the program was rather messy. I originally had if statements such as “if (marketValue - 200 <= 0)” which I changed to “if (marketValue <= 200)” because that makes more immediate sense. Also, instead of using an if-else ladder, I used the else to change the stored value of marketValue (marketValue = marketValue-200) for use in the following if-else statement, so that the next if statement originally read “if (marketValue - 300 <= 0)”. Again, this was changed so that the program would make more immediate sense to the reader, and the if statement became “if (marketValue <= 500)”.

Test Data:

Testing error messages:

Negative market value (-100, A, CA)

No property identification entered (100, , CA)

No state entered (100, A, )

Negative market value, no property identification, and no state entered (-100, , )

No property identification and no state entered (100, , )

Negative market value and no state entered (-100, A, )

Negative market value and no property identification entered (-100, , CA)

Testing if calculations are done properly for different ranges and states:

Market value below 200 million for NY (100, A, NY)

Market value below 200 million for NJ (100, A, NJ)

Market value below 200 million for another state (100, A, IL)

Market value above 200 million but below 500 million for NY (487, A, NY)

Market value above 200 million but below 500 million for NJ (487, A, NJ)

Market value above 200 million but below 500 million for another state (487, A, MI)

Market value above 500 million for NY (550, A, NY)

Market value above 500 million for NJ (550, A, NJ)

Market value above 500 million for another state (550, A, OK)

Market value of 0 for NY (0, A, NY)

Market value of 0 for NJ (0, A, NJ)

Market value of 0 for another state (0, A, WI)

Market value of 200 million for NY (200, A, NY)

Market value of 200 million for NJ (200, A, NJ)

Market value of 200 million for another state (200, A, GA)

Market value of 500 million for NY (200, A, NY)

Market value of 500 million for NJ (200, A, NJ)

Market value of 500 million for another state (200, A, FL)

Testing that non-integer input works as intended:

Non-integer market value below 200 million for NY (150.5, A, NY)

Non-integer market value below 200 million for NJ (150.5, A, NJ)

Non-integer market value below 200 million for another state (150.5, A, MI)

Non-integer market value above 200 million but below 500 million for NY (250.5, A, NY)

Non-integer market value above 200 million but below 500 million for NJ (250.5, A, NJ)

Non-integer market value above 200 million but below 500 million for another state (250.5, A, OH)

Non-integer market value above 500 million for NY (550.5, A, NY)

Non-integer market value above 500 million for NJ (550.5, A, NJ)

Non-integer market value above 500 million for another state (550.5, A, KY)